

R E M A R K S

The specification has been amended at p. 11 to correct the description of the embodiment of FIG. 7. Since FIG. 7, like FIG. 2, is a plan view (specification, p. 8, line 1), and since rolls 28, 30 in FIG. 7 are described as having vertical axes while rolls 42, 44 in both FIGS. 2 and 7 have horizontal axes (p. 11, lines 15-17), it is clear that the wires 24A emerging from rolls 28, 30 are all in a vertical plane and rotate as a set to a horizontal plane to pass between rolls 42, 44, as now set forth in the replacement paragraph. No new matter is introduced by this amendment of the specification.

Claim 38 has been amended, and new claim 46 has been presented, to define further and more fully certain novel and distinguishing features of the invention. To ensure entry and consideration of these amendments, a Request for Continued Examination is being submitted with this Amendment after final rejection.

Since the present Amendment does not increase either the total number of claims or the number of independent claims (beyond that previously paid for), no extra-claims fee is necessary.

Claims 38 (apparatus; independent; amended), 39 - 45 (dependent on 38), and 46 (apparatus; independent; new) are now in the application. All these claims are directed to the elected apparatus invention and are readable on the elected species (FIGS. 1-2).

Claims 38 - 45 have been finally rejected under 35 U.S.C. §103(a) as unpatentable over U.S. patent No. 3,760,093 (Pemberton) in view of U.S. patent No. 3,530,661 (Thomen). This is the only ground of rejection or objection in the final Office Action.

Support for Claim Amendments

Claim 38 has been amended to specify that the stranding machine is a machine for stranding the assembled wires into a cable. This added recital is supported by the disclosure in the specification at p. 10, lines 22-28.

Claim 38 has also been amended to recite that the wires from the supply advance through the assembling equipment to the stranding machine in spaced relation and then in assembled relation to each other. The added recital is supported e.g. by the showing of FIG. 2, wherein the wires 24A and 24B are shown as advancing through the assembling equipment in spaced relation to each other and then the core 54 and cable 70 are shown as coming into assembled relation at dies 52, 68, and by the disclosure in the specification e.g. at p. 8, lines 25-28 ("In this [cable-assembly] area, individual aluminum wires 24 are advanced in spaced parallel relationship") and at p. 10, lines 9-25 (assembly of core 54 and cable 70).

In addition, claim 38 has been amended to recite that the roll sets are adjustable and/or replaceable. This recital is supported by the disclosure in the specification at p. 4, lines 19-21.

Claim 38 has been further amended to recite that each roll set is configured and disposed for separately rolling each advancing wire at a location at which the wires are in spaced relation to each other. This recital is supported e.g. by the showing in FIG. 2 of the position of roll sets 28, 30 and 40, 42 at locations where the wires 24A and 24B are in spaced relation to each other, and by the disclosure in the specification e.g. at page 8, lines 26-28, taken in conjunction therewith.

New claim 46 defines similarly to claim 38, but adds thereto a recital that "the stranding machine includes a pulling device for advancing the wires from the supply through the assembling equipment and to and through the stranding machine and the assembling equipment guides the wires advancing therethrough in spaced relation to each other and then convergently into assembled relation to each other." This recital is supported by the disclosure in the specification e.g. at p. 10, lines 30-34 ("a capstan for pulling the cable and wires through the entire apparatus"), the pulling device being shown at 18 in FIGS. 1 and 2 and being described as part of the stranding machine (p. 8, lines 21-22), and by the showing of guide rollers 26 and 40, stranding plates 50 and 66 and dies 52 and 68 in cable-assembly area 22 in FIGS. 1 and 2, together with the description of their structure, arrangement and functions at p. 8, line 25 - p. 10, line 25.

It is submitted that all the amendments herein made to claim 38, and new claim 46, are fully and properly supported by the written description and illustrated in the drawings.

The §103(a) Rejection

The Office Action, in finally rejecting claim 38 under §103(a) as unpatentable over Pemberton in view of Thomen, asserts that Pemberton discloses "a plurality of rollers" (sic; dies) and that "it is inherent that the rolling passes" (dies) are "positioned between the supply and the stranding machine," but states that "Pemberton fails to disclose roll sets." The Action then further asserts that "Thomen discloses roll sets" and shows "different locations of roll sets," and that it would have been obvious "to modify Pemberton by providing roll sets, as taught by Thomen."

Applicants respectfully submit that the asserted combination of Pemberton and Thomen would not meet or make obvious the invention defined in present claim 38, especially as herein amended.

Critical to the claimed invention is the structural feature that each of the recited roll sets is configured and disposed for separately rolling each advancing wire at a location at which the wires are in spaced relation to each other, to reduce the cross-sectional area of the wire. It is this individual reduction of each wire while the wire is separate from any other wire that achieves the advantages of the invention that are described, for example, at pp. 4-7 of the specification.

In Pemberton, as will be apparent from FIG. 3, the wires are passed through dies only after a number of them have been assembled together. This is made clear in the specification:

"To form the conductor 10 the central wire 11, along with six identical wires of the layer 12, are pulled through a wire drawing die 17 which compresses or compacts the strand, . . . deforming the initial circular shape of both the wire 11 and the wire of the layer 12"
(Pemberton, col. 3, lines 15-23; emphasis added).²

There is nothing in Pemberton that teaches or suggests, expressly or inherently, any arrangement of apparatus that reduces the cross-sectional area of any individual wire separately, at a location at

²In contrast, applicants' claimed apparatus having roll sets that reduce the individual wires separately, while they are in spaced relation to each other, is able to provide wires of reduced but circular cross-section, although the claims are not limited thereto. See applicants' FIG. 4B and the accompanying description in their specification.

which the wires are in spaced relation to each other, or even any reason for thus modifying Pemberton's disclosure.

If Pemberton were modified in view of Thomen by substituting roll sets, as shown by Thomen, for the dies of Pemberton, the roll sets would still only act on pre-assembled groups of wires in contact with each other, not separately on wires at a location at which the wires are in spaced relation to each other. As Thomen's FIGS. 4 and 4A explicitly illustrate, the rollers 45 are positioned to engage the wires only at locations at which a plurality of wires are already stranded together. Again, there is no disclosure and no remote suggestion of rolling wires separately while they are spaced apart from each other.

Applicants respectfully submit that the Office Action is in error in asserting that "it is inherent that the rolling passes" (or dies) are "positioned between the supply and the stranding machine," in either Pemberton or Thomen. Both patents show dies or rollers only acting on already-stranded bunches or layers of wires, i.e., beyond a stranding location, with respect to the location of the supply.

Since neither of the two applied references teaches or suggests the provision of roll sets for separately rolling each advancing wire at a location at which the wires are in spaced relation to each other, it is submitted that no combination of their disclosures could make that feature obvious. Therefore, applicants further submit, the recital of that feature in each of amended claim 38 and new claim 46 presents a clear and patentable distinction over Pemberton and Thomen, however combined. Claims 39 - 45 are submitted to be allowable as well, by virtue of their dependence on claim 38.

For the foregoing reasons, it is believed that this application is now in condition for allowance. Favorable action thereon is accordingly courteously requested.

Respectfully,

Christopher C Dunham

Christopher C. Dunham
Reg. No. 22,031
Attorney for Applicants
Tel. (212) 278-0400

I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Christopher C Dunham
Christopher C. Dunham
Reg. No. 22,031 Date MARCH 26, 2007